

### Chemistry-I Open House “Problems”

This is a non-scoring assessment of your knowledge and skills in several content areas that will be covered in this course. Please put in your BEST EFFORT.

1. Describe each of the following as being either an Element, Compound, Heterogeneous mixture or Solution:
  - a. Carbon Dioxide
  - b. Beach Sand
  - c. Phosphorus
  - d. A glass of Kool-Aid
  
2. Describe each of the following as being either a PHYSICAL Change or a CHEMICAL Change:
  - a. bending a piece of copper wire
  - b. burning a marshmallow
  - c. dissolving sugar in water
  - d. reacting magnesium in acid
  
3. Basketball player “A” takes 10 foul shots and makes 9 of them. Basketball player “B” takes 10 foul shots, makes 1 of them, and the other 9 bounce off the front of the rim and miss. Describe both the ACCURACY and the PRECISION for the foul shooting of each player:

Player A:

Player B:
  
4. Calculate the sum of the three mass measurements:  $4.3\text{ g} + 3.76\text{ g} + 5\text{ g} =$   
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5. Describe the actions and equipment you would use in the following lab accident scenario:

“While carrying a beaker of hydrochloric acid, you trip on a lab stool. The beaker falls to the floor and breaks, while the acid forms a large puddle on the floor.”